

## DRAFT REGISTRATION DAY IS SEPTEMBER 12

Congress Passes Measure Which Places Nearly 13,000,000 Men Between Ages of 18 and 46 in Line for Army Service

### INSTITUTE AID UNCERTAIN

All men from eighteen to forty-five years of age, inclusive, in the continental United States, except those in the Army and Navy or already registered, were summoned by President Wilson last Saturday to register for military service on Thursday, September 12th. Machinery of the Provost Marshal General's office was set in motion to carry out the second great enrollment under a Presidential proclamation issued after the President had signed the new man-power act extending the draft ages. The bill, completed in Congress the previous day, was sent to the White House for the President's signature immediately after the House and Senate convened.

**Law Affects 12,778,758**  
It is estimated that at least 12,778,758 men will register this time, compared with nearly 10,000,000 on the first registration of men from twenty-one to thirty-one on June 5, 1918. Of those who enroll now it is estimated

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## NAVAL AVIATORS TO COMPETE IN N. E. A. A. U. TRACK MEET

The N. E. A. A. U. track and field championship which will be held at Tech Field September 14, will include 100-yard dash, 220-yard dash, 400, 880, mile and three-mile runs, 120 and 220-yard hurdles, high and broad jumps, pole vault, shotput, hammer throw and javelin. The Technology Naval Aviation School and other service teams will compete.

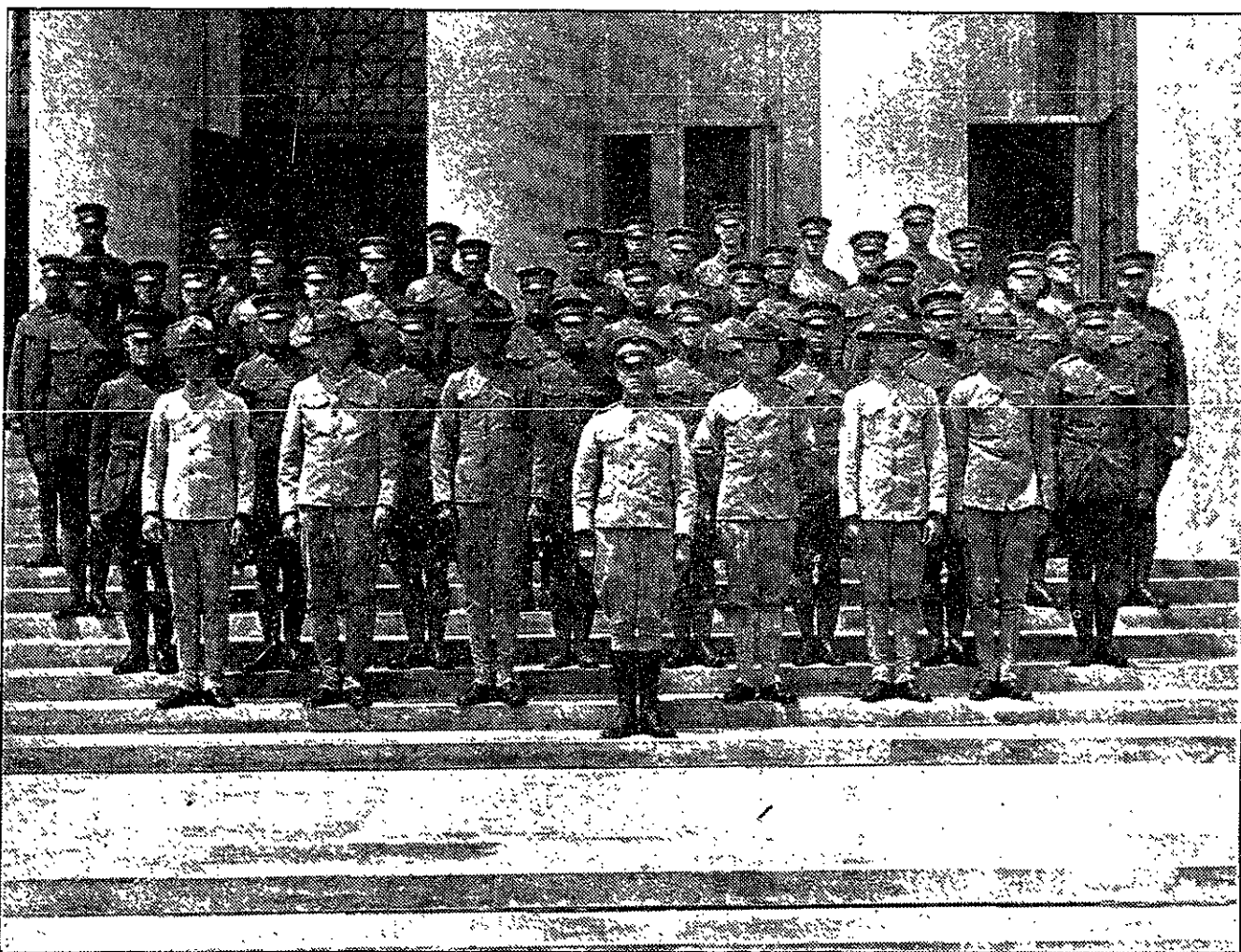
## TECHNOLOGY MAN APPOINTED A CHEMIST AT WASHINGTON

Elwood Overholser, son of Mr. and Mrs. F. M. Overholser of Wellesley Hills, Massachusetts, has been ordered to Washington as a bacteriologist and chemist in an experiment station of the Department of Gas Defense. After being graduated from the Wellesley schools, Overholser took a course in chemistry and bacteriology at Technology. He enlisted in September, 1917, and was assigned to Fort Andrews and later to the Army Medical School at Yale University. Before enlisting Mr. Overholser was connected with the public health laboratory at Wellesley.

## STUDENT TRAINING CORPS MOBILIZED BY OCTOBER 1ST

Members of the Students' Army Training Corps, consisting of boys between the ages of eighteen and twenty-one, will be mobilized October 1st at more than 300 colleges selected for that purpose by the War Department, according to details of the plan announced last Saturday. The members of the Students' Army Training Corps will be "soldiers on active duty," a statement issued by the War Department says. Upon their induction into service their subsistence, quarters, clothing and tuition will be provided by the Government and the student soldiers will receive the pay of privates in the Army. High school graduates will be eligible to the collegiate training division of the corps and grammar school graduates may enter the vocational section. If the students show ability they will be transferred to new divisions, and those showing special qualifications will be sent to officers' training schools. Others will be assigned to noncommissioned officers' schools. The War Department in its statement advises youths now ready for college entrance or already enrolled in a college to adhere to their plans and obtain voluntary induction into this corps.

## TECHNOLOGY GRADUATES FIRST SQUADRON OF MARINE AVIATORS



FIRST FLIGHT OF MARINES GRADUATED FROM AVIATION SCHOOL

The Technology Marine Aviation School is an organization that has the misfortune to be incorporated with a larger and more renowned one than itself and for that reason it has never gotten the credit that it well deserves. At the Institute the men are being put through the same course that the men in the Technology Naval Aviation School take. These men are put together with the naval men, and are even in the same companies with them. So there is little difference to be seen in the two schools here. It is when the men get to the advanced ground school, and in flying school that the difference is first seen.

The great difference in the instruction from here on is that the Marines are instructed in the use of ground planes as well as that of sea planes. The advanced ground school and flying school are located at Miami, Florida, which is one of the best managed schools in the country. The course there is about twelve weeks, and the men or arrival are divided into sections of about forty men. The men there take up the repairing and assembling of the planes, elementary flying, and the further use of the machine gun. They are instructed in its use not only on the ground, but also in the air. The course of instruction is aimed to give not only aerial, but also thorough ground training, so that every man that comes out of the school will be not only a competent flyer, but also an expert mechanic. An idea of the requirements of the course can be obtained when we say that in the Marine school eighty-five hours in the air are required, while the standard in all of the other flying schools is much lower than that. In the Naval Aviation School the standard has been made at about twenty hours, while in the Army School there is no set amount of time. The men are turned out as soon as they are fit.

## FLIGHT 29 FAREWELL

Enthusiastic Entertainment Prof-  
fered Last Friday

Friday evening, the last one for Flight 29 at the Receiving Ship, was occasioned by a farewell entertainment given by their erstwhile companions. The show was very cleverly arranged, offering a great variety of amusement, all of the kind judged to take the men as far as possible from thoughts of work. It was a masterpiece of its kind, from start to finish. The entertainment was opened by a humorous sketch, "The Cruise of the Good Ship Cuspidor." This was followed by several more numbers, the important ones being a boxing match and an exhibition by "Professor" Anderson. During a lull in the program, chocolate, cake and "smokes" were passed around.

(Continued on page 3)

The school at Technology was started on June twenty-fourth, with about forty-two members. Since then it has grown till at present there are about 250 men enrolled. There has always been a ruling in the Marine Corps that their officers were to be taken from the ranks, and when these new men tried to become flyers, there was some dispute as to whether they were to receive commissions, and it was finally decided that civilians were to be admitted and were to be given commissions. This letting-down of the bars, however, is to last only during the duration of the war. At present about two thirds of the men in the schools are from civilian life.

With the increase that the war has made in the Marine School, it is intended that the flying department shall be very much increased, in order that the Marines may be able to have their own flyers with their own men.

The school at the Institute is one with about the finest spirit that can be found anywhere, and with the training that the men are getting, and the men that are behind it, it is not to be wondered at if we hear great things from the Marine Aviation in the near future.

## PARIS SERVICE CLUB IS MERGED WITH RED CROSS

Organization Was Started by Mother of  
Kenneth Weeks '12

Mrs. Alice S. Weeks of Boston, mother of Kenneth Weeks '12, who founded the home service for American soldiers abroad, announced yesterday that her work has been absorbed by the Red Cross and in future will become a part of the home communication service activities in France. The old headquarters at 21 Champs-Elysees will be closed and the work continued under the Red Cross from 4 Place de la Concorde.

The service was inaugurated by Mrs. Weeks in memory of her son, Kenneth Weeks, a graduate of Technology in the Mechanical Engineering Course with the Class of 1912, who was killed while fighting with the foreign legions on June 17, 1915. She mothered the boys of her organization, giving them advice, seeing that they had what they needed in the way of comforts and keeping in touch with their families at home.

## DEATH OF WASGATT '19 HAS BEEN CONFIRMED

War Department Officially Ad-  
vises Father of Institute Grad-  
uate of His Son's Death in Base  
Hospital

### FORMERLY REPORTED INJURED

The death of Lieut Harold C. Wasgatt of the Machine Gun Company, 59th Infantry, Regular Army, was officially confirmed this morning, when his father, Ex-Mayor Herbert C. Wasgatt of Everett, received a dispatch from the War Department, stating that Lieut. Wasgatt died of wounds at a base hospital in France on July 25.

The confirmation of the death of Lieut. Wasgatt relieves the suspense and uncertainty of his relatives and friends. He was once before reported dead and later word was received that he had only been injured. The first news stated he had died from wounds; a second notice which came two weeks later said that he was injured, degree undetermined, and in a base hospital.

Wasgatt was a member of the Everett High School football team which claimed the championship of the country in 1915, after defeating Oak Park High School, Chicago. He entered Technology in 1915, registering in the Chemical Engineering course. At the close of his freshman year he went to the officers' training camp at Plattsburg, and the following fall he returned to school. After war was declared in 1917 he again went to Plattsburg, where he received his commission as first lieutenant. He was assigned to the 59th and left at once for overseas duty.

Lieutenant Wasgatt is twenty-two years old. He is a member of the Kappa Sigma fraternity.

How much of your income do you fritter away and how much do you invest in W. S. S.? Remember that the men at the front give their lives.

## ENLIST IN S. A. T. C.

Communication Received From  
Dr. MacLaurin So Urges

The Student Army Training Corps utilizes the experience and machinery of the colleges in the selection and training of men. The best men will be sent to Officers' Training Camps or kept at college until they have obtained sufficient training to be of real service as doctors, sanitarians, engineers or chemists. These technical experts can not be trained in a few months so that the best students in fields such as medicine, engineering and chemistry, may be kept at college longer than others. This, however, will be done not as a privilege, but as a matter of military necessity. It will be noted that the student soldier is on active duty and as such will not only be paid, housed, and fed, but will receive his training without expense to him. Under such circumstances, the young men of the country will naturally go to the best colleges in so far as they can satisfy the entrance requirements. Limitations of space and of teaching facilities will make it necessary for the best colleges to select their students with unusual care.

The plan gives equal opportunity to all, rich and poor alike, and ability and character should determine the issue. I advise the patriotic and able-bodied youth of the country to get as speedily as possible into the S. A. T. C.

(Signed) RICHARD C. MACLAURIN

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The Editor-in-Chief is always responsible for the opinions expressed in the editorial columns, and the Managing Editor for the matter which appears in the news columns.

## IN CHARGE THIS ISSUE

Carole A. Clarke '21 ..... Night Editor

WEDNESDAY, SEPTEMBER 4, 1918.

## TRUE PATRIOTISM MAKES SACRIFICES

**T**HE crucial test of patriotism is willingness to sacrifice one's own interests for the good of the country.

It is easy enough to be patriotic when one has something to gain by it. If patriotism makes one's business grow, it is no trouble at all to wave a flag and pose as a patriot; but when the nation calls for a sacrifice of business and profits, the test is severe.

I have recently been connected with a campaign to raise money for the War-Camp Community Fund. I have also been associated with Red Cross and Liberty Loan campaigns. In all of these activities I have had occasion to study the attitude of many people who ostensibly were patriotic and yet were unwilling to make any sacrifices. When analyzed, their patriotism seemed to lie almost altogether in talk.

On one occasion it was necessary to enlist the services of quite a number of men in making a house-to-house canvass, and I was astonished at the unwillingness I encountered on the part of men who had no valid excuse for refusing to do this work. Fully two-thirds of those who were requested to take certain districts and canvass them, in this patriotic service for our country, refused. When pressed for reasons they could simply say they were too busy, that they were not trained in this sort of work, or that it was displeasing to them.

The result was that a comparatively small number of men shouldered the job and put it through. These men sacrificed their time, comfort, and sometimes expense money. For several weeks they worked at least part of the day and almost every evening. In the course of this canvass they had occasion to call at the homes of the very men who had refused to help, and sometimes they found these men idling the evening in comfort.

In numerous instances people made promises apparently with no intention of keeping them. Some of them promised to report by telephone and name the amount of their subscriptions, but they were never heard from.

What we need especially in this country today is a great awakening on the part of the people to the fact that we are at war, and that our situation is serious. We need real patriots, not bogus ones. It ought to be comparatively easy to put through the various campaigns necessary to raise the money the government needs, and it would be easy if the people themselves would take hold.

And after all, these sacrifices we make at home are trivial beside the great sacrifice made by the men who go to the front and really fight the war for us.

EDWARD M. WOOLLEY.

—M—I—T—

Why can't we have a blue stripe on the French flag flying from one of the Institute's poles?

—M—I—T—

We hope that soldier and sailor ride posters will be found on all Technology men's autos.

—M—I—T—

THE TECH announces the election of E. R. Haigh '21, and P. E. Guckes '21 to the News Staff.

## PERSONALS

Mr. and Mrs. Henry E. Woodworth of 90 Naples Road, Brookline, Mass., announce the engagement of their daughter, Mildred, to Cadet Lloyd French Hoops '21, son of Mr. and Mrs. Thomas Hoops, Jr., of Middletown, Connecticut.

Cadet Hoops, while a student at the Institute in the class of 1921, entered the Aviation Section of the U. S. Signal Corps, and having been graduated from the United States School of Military Aeronautics at Technology, is now stationed at Dallas, Texas, awaiting orders to a flying field.

Mr. and Mrs. W. J. Kennard of 15 Folsom street, Dorchester, have received word that their son, John W. B. Kennard '18, a well-known Dorchester boy, has been commissioned a second lieutenant in the Signal Battalion of the Marine Corps.

He prepared at English High School and was graduated from Technology



LIEUT. JOHN W. B. KENNARD '18

last June with the Class of 1918, as an electrical engineer. He enlisted in the Marines immediately after graduating and was assigned to the Navy Yard at Philadelphia, Penn.

At the Institute, Kennard was a member of the Electrical Engineering Society, the English High School Club, and the Rifle Club.

Clarence J. A'Hearn, son of Mr. and Mrs. John J. A'Hearn of 13 Bruce Street, Dorchester, Mass., has just been commissioned a lieutenant in the Aviation Corps. Lieutenant A'Hearn was born twenty-four years ago in South Boston, and was graduated from Mechanic Arts High School in 1914. He was in the employ of the Boston & Maine Railroad.

He enlisted in the Summer of 1917, and entered the Naval Aviation School at Technology. He later was transferred to Princeton, and finally to Kelly Field, San Antonio, Tex.



**PRINCETON UNIVERSITY**—Notice was sent on Aug. 16 by the Bureau of Navigation of the Navy to enlisted men of the Navy, the Coast Guard and the Naval Reserve Force, of the establishment of an officers' material school for the Pay Corps at Princeton University, through the co-operation of the trustees and faculty of that institution. The instruction staff will be composed of officers and men of the Navy and the Naval Reserve Force. The capacity of the school is 500 students, a new class of 250 entering on the first of each month, beginning September 1st. Men who successfully pass the two months' course and are recommended by the commanding officer as the result of passing the prescribed examination will be reported to the Bureau of Navigation as eligible for commissions as paymasters, U. S. N. R. F., with the rank of ensign, for general service. Men who are not successful in passing the examination will revert to the ratings previously held by them.

**CHARLESTON COLLEGE**—The board of trustees of the College of Charleston has passed resolutions which, after ratification by the City Council, open the courses of the college to women. According to a writer in The Columbia (S. C.) State, the terms under which this change is carried into effect are as follows:

That until otherwise ordered by the trustees of the college, the eight academic departments of instruction shall be open to women on exactly the same terms as now apply to men, provided that the board of trustees of the College of Charleston may decide at any

future date to revert to the present system.

There shall be added to the list of accredited schools all institutions for girls which now appear on the approved lists of the state high school inspector and the commission of the Association of Colleges and Secondary Schools of the Southern States, from all of which such applicants as are graduates will be admitted without examination.

## U. S. NAVY ORGANIZES COAST GUARD WORK AGAINST U-BOATS

In order to maintain the full protection of the American coast the Navy has coast patrol that has been wonderfully effective when the number of ships that are constantly traversing the waters adjacent to our coast is considered, and none of the disasters that has occurred off our shores is in any way attributable to the neglect of the Navy Department. Whenever the presence of submarines has been indicated, and that has been frequently, a complete system of warning has been sent out. The extent and character of this patrol has never been disclosed fully, but it comprises cruisers, destroyers, submarines and submarine chasers. But even with the most complete patrol it is not deemed extraordinary that an occasional submarine may ship in and destroy some shipping. It is probable that at no time have there been more than three German submarines off the coast of the United States and one of these submarines has probably been accounted for.

The report published that a commander of a German submarine told some of his victims that he had visited a theatre in New York is not an impossibility. The statement has even been made by the captain of one of the wrecked ships that while in a saloon in New York he recognized and was recognized by an officer of the submarine which sunk his ship. The captain said that he was so unmoved by his experience and surprised when he saw the German that he allowed the man to escape without attempting to apprehend him. It is probable that the Navy Department does not accept the statement of the U-boat victim in its entirety, but there is no reason why a submarine might not occasionally send one of its crew ashore, as some of the submarines encountered off the French and English coasts have been equipped with collapsible boats which were used for boarding purposes. There is no denial from official sources of the statement that the German submarines have twice cut the cables along the coast. In each case the cable has been repaired within a reasonable time and search made for the submarine.

## Navy Adds New Ships

Scarcely a day passes without new ships of one type or another being added to the American Navy and additional ships being made available for patrol duty. Devices with which the new ships are being equipped render it unlikely that a submarine will successfully avoid them once the submarine is located, but the vast space to be covered indicates the difficulty, in fact, the impossibility, of covering every foot of space. Each day decreases the menace from German submarines and increases the protection against them. The total of accomplishment by the U-boats may be summarized in the destruction of fishing craft, strewing of mines and the sinking of one or two merchant ships, none of which accomplishments has any real military value. It has not been disclosed how many mines the Navy craft have swept up, but the main channels of commerce have been kept free from them. The most serious loss caused from that source was the sinking of the U. S. S. San Diego. It is a fact that large numbers of ships leave American ports every day and their progress has not been retarded. There is no doubt that the German naval officials know they are going but the complete protection afforded by our Navy convoys has prevented any interference by the submarines. That the lanes of travel followed by the tankers from the Mexican oil fields and from the Texas oil fields are guarded is proven by the prompt and regularly maintained delivery of fuel at the supply bases in Europe. The line of patrol vessels may be said to extend from Newfoundland to the Isthmus of Panama, and with the complete chain of naval aeronautic bases and coast guard that has been maintained it is unlikely that a submarine will be able to operate often with success at any point along this line. Every day the line is being strengthened and the chances for successful operation of submarines are being lessened.

## Many U-Boats Have Been Destroyed

There is reason to believe that approximately 200 German submarines have been destroyed since the beginning of the war. Official figures have been published indicating that about 170 have been destroyed and those figures were not made up of uncertainties. It is un-

likely that the German navy, which probably has less than 125 submarines left, will attempt any extensive raiding alone the Atlantic Coast. So far as the operation of our Navy in foreign waters is concerned enough has been published to show that our participation with the Allies has been of material assistance and the number of American naval air bases along the British, French and Mediterranean shores is not inconsiderable, and is a strong indication of the splendid co-ordination and co-operation of our Navy with the navies of our Allies.

## NEBRASKA PUSHING POTASH PRODUCTION BY NEWS PLANTS

Great Demand For War Necessities Speeds Up Work

Potash production in Nebraska will go forward rapidly the next year. Six plants turning out a total of 500 tons a day are now in operation, and three others will start within a few months, likely doubling the present output. Potash is now selling at five dollars and five dollars and a quarter a unit, which means from one hundred to one hundred and ten dollars a ton, where, before the war, the best price obtainable in New York was twenty-eight dollars a ton. The nation's supply came from the potash mines of Germany, where low production costs made it possible to lay the product down in New York at a price less than it can be produced for in this country, where different and costlier methods of extraction are necessary.

The original plant in Nebraska is said to have made \$5,000,000 for its owners, and the rich returns the stockholders of other plants have been getting has caused an interest in Northern Nebraska, where the deposits are found, akin to that of a strike in the gold country. Hundreds of prospectors have been in the field all summer, and a dozen new companies are now in process of formation.

The State has found it necessary in order to protect investors, to place a force of experts in the field to test all of the lakes and to certify the value of the potash therein. Under the state law companies offering stock to the public must secure permission from the Railway Commission. The original plant was confined to a small area in Southern Sheridan County, and here all of the present plants are located. The wide spread prospecting, however, has led to the discovery of deposits in other localities, and these are in process of testing and development.

Potash is found in the brines and beds of lakes in the cattle country on land that was worthless save for grazing. Many of the ranchmen are in present and prospective receipt of hundreds of dollars a day royalties, and practically every lake in that section, whether it has potash in paying quantities or not, is under lease. The process is purely one of pumping the potash in solution from the lakes and lake beds to an evaporating plant. Several of these require investments of \$500,000 each.

## State Taking Hold

The state survey is now directing attention to devising methods of production for the owners of small lake remote from pumping plants, so as to bring the cost to a point where profitable operation of small units is possible. Simple evaporating methods are employed at these to extract the potash, and the product is transported to the railroad in motor trucks.


Chemists are seeking to extract from the solids one or more of the chemicals contained therein. The stuff left after evaporation contains only from fifteen to thirty-seven percent of potash, and successful process of getting the remaining chemicals out will make the potash a by-product, so valuable are these. One company is understood to have isolated three of these chemicals, and its stock is not to be purchased on the market.

So valuable is potash at the present time that the big beet sugar factories of the State are building large reservoirs into which they run the water used in washing the beets. This is impregnated with a sufficient amount of potash to make this method of getting it out profitable.

## NEW ELECTRICAL POWER PLANTS ARE PROPOSED

Plans have been made to ask Congress for \$200,000,000 to finance the erection of huge electric central power plants, various parts of the United States, to meet the needs of the country's war industries, according to a statement issued by William Potter, Federal fuel administrator for Pennsylvania.

The proposed legislation is in line with the efforts of the National Fuel Administration to conserve coal, transportation and the supply of electric power. Mr. Fuller said the territory most affected embraces Pennsylvania, New Jersey, New York, Eastern Ohio, Northern West Virginia, and indirectly New England.



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**FLIGHT 29 FAREWELL**  
(Continued from page 4)

While the men were still eating, a representative of the departing flight made a short speech in the presenting of a fine Victrola to the Receiving Ship, Ensign Squibb, in behalf of the men now at the ship. Ensign Equibb, in behalf of the men now at the ship and those to come, thanked the men for their generous gift. The entertainment from then on consisted mainly of singing, interrupted by an exhibition dance given by two members of Co. 29. In closing the men sang the Star Spangled Banner and some flight songs, and gave cheers for their various friends and leaders.

**13,000,000 TO REGISTER**  
(Continued from page 1)

that 2,300,000 will be called for general military service, probably two-thirds of the number coming from among the 3,500,000 or more between the ages of eighteen and twenty-one. General March has said all registrants called into the Army will be in France before June 30, swelling the American Expeditionary Force to more than the 4,000,000 men expected to win the war in 1919. The last to be called will be the youths in their eighteenth year, but those of that age who desire and who have the necessary qualifications may be inducted into service October 1st for special technical or vocational training.

Registration this time will be conducted as heretofore by the local draft boards. All Federal, State, county and municipal officers are called upon to aid the boards in their work to preserve order and to round up slackers. The hours of registration will be between 7 o'clock a. m. and 9 o'clock p. m.

All registrants will be classified as quickly as possible under the questionnaire system and a drawing will be held at the Capital to fix the order of registrants in their respective classes. The Provost Marshal General's estimate today places the number of men under twenty-one now in the Army at about 245,000 and the number of those from thirty-two to forty-five at 165,000.

**Rules for Registration**

All men within the new ages, whether citizens of the United States or not, must register, unless they are diplomatic or consular representatives of foreign Nations.

In case of illness on registration day, arrangements for tardy enrollment may be made with local boards and men who expect to be absent from their homes may register by mail, sufficiently in advance that the registration record reaches the board by September 12th. If a man has no permanent residence, he is to register at the place he is on September 12th.

Although the "work or fight" clause, which would have affected striking workmen, was taken out of the bill before passage, Provost Marshal General Crowder has planned to apply vigorously existing regulations relating to idle employment to the newly registered men.

There has been no definite indication as to how Technology will aid in registering its students, but the plans of the Institute officials will be announced shortly in the columns of THE TECH.

**FINAL FRESHMAN DRILL**

Major Cole, who has been absent from the Institute for some time on account of a serious illness, was present last Saturday morning to review the Junior Freshmen in their final drill of the year. Three-quarters of an hour was used for an inspection and drill, after which the company marched to the lecture hall to receive an address by the Major.

He told them how poor the men were in drill when he first came to Technology, and how the war failed to change their attitude at all. This summer he decided to let Colonel Hamilton personally supervise the men, in hopes that he would get some real life into the drill. Needless to say, the plan succeeded. The drill was by no means perfect, but the students certainly put spirit into the work. He then gave as much information about the S. A. T. C. as he knew at that time, all of which has since been given out to the public in the columns of THE TECH.

**HOWARD '89 WANTS ENGINEERS FOR U. S. MERCHANT MARINE**

Henry Howard '89, director of the Shipping Board Recruiting Service, at the headquarters in Boston, has decided to accept 4000 men between eighteen and thirty-five years old, inclusive, during September, for the merchant marine training service of the United States Shipping Board.

Three thousand of these men will be inducted into the training service at the Technology Shipping Board Schools and

will include 1500 for training as firemen, 600 sailors and 900 stewards, cooks and messmen.

These men may enroll through special enrolling agents at drug stores. There are now about 6500 druggists in the forty-eight states acting as dollar-a-year men for the Shipping Board Recruiting Service by enrolling men for sea training. Their chief is Louis K. Liggett of Boston.

Marine engineers holding land jobs are on a special list kept by the shipping Board, which may soon call on all such mariners to say farewell to terra firma and lend a hand in manning the new ships of the merchant marine. The list was prepared by agents of the sea-service bureau of the Shipping Board's recruiting service, who held a convention at Boston.

The convention notified Chairman Edward N. Hurley, of the Shipping Board, that there is a shortage of chief and first assistant marine engineers, recommended that men holding licenses for lower grades be urged to try for higher licenses, and suggested that engineers now ashore be drawn upon to fill berths now vacant on ships at Atlantic and Pacific ports. Chairman Hurley, of the Shipping Board, authorized the sea-service bureau to take any measures necessary to secure the engineers needed, in addition to the 500 a month now being specially trained at Shipping Board schools.

**ARMY O. T. C. A SUCCESS**

The news from the Infantry Officers' Training Schools is that the progress of the student candidates has been so marked that the success of the system of Central Training Schools is assured. Without attempting to foreshadow results in the present schools it may be said that the percentage of candidates who give promise of winning their commissions handsomely seems now to be higher than at any previous cap. This fact is attributed to two causes. First, the candidates from the Army have had longer time in camps than their predecessors had when they entered the schools; and second, the concentration of experienced training officers in the central camps has given a degree of homogeneity to the instruction that hitherto has been wholly lacking. The success of the schools has proven that in every way the present plan is better than the former method and that these schools are likely to be extended for the purpose of training the very large number of officers that must be made ready for the new Army that is to be placed in France before next July.

The system for the central schools for Engineers, Field and Coast Artillery and other branches is not quite the same as that of the Infantry camps, where classes are formed and graduated in a large body. The Engineers and Artillery Schools are graduating some students each week, but orders prevent the inflow of new men to take the places of those who thus leave the camp. There is great need of developing these schools to the limit. Field Artillery is so much in need of officers and enlisted men that it was found necessary to break up the fifteen regiments of cavalry to form the bases of thirty regiments of Artillery. The object of the order limiting the inflow of new students apparently is to cut off the rush of men within the expected extension of the draft ages so that all coming from that source into the Army may have equal chance in winning commissions.

**FLYING FIELDS ARE ENLARGED**

For the extension of instruction in gunnery and in order that more flyers may be trained on this side of the Atlantic, the Division of Military Aeronautics, on the approval of the Secretary of War, is now leasing land for target practice near the larger flying fields. A tract of 10,000 acres has just been leased outside of Fort Worth, Texas, and not far from Taliaferro, Barron, and Carruthers Fields. Within a few miles of Hazelhurst Field, Mineola, Long Island, and fronting on the South shore, another tract of 750 acres has been leased at Wantagh, known as Lufbery Field, and additional marshy land is being secured. A piece of fifty and one-half acres, adjoining Mineola Field, has been leased and has been leveled for a drill and exercise ground.

**ENGINEERS OR SURVEYORS WANTED AT CHARLESTON, S. C.**

Three junior engineers or surveyors and six surveymen are wanted by the district engineer, Charleston, S. C., for duty in connection with survey of Charleston Harbor, South Carolina, and its channel, for improvement to provide a channel forty feet deep and 1,000 feet wide. Application should be made direct to the District Engineer, room 33, Customhouse, Charleston, S. C., stating fully experience and qualifications, present salary, and lowest salary acceptable, age and draft classification.



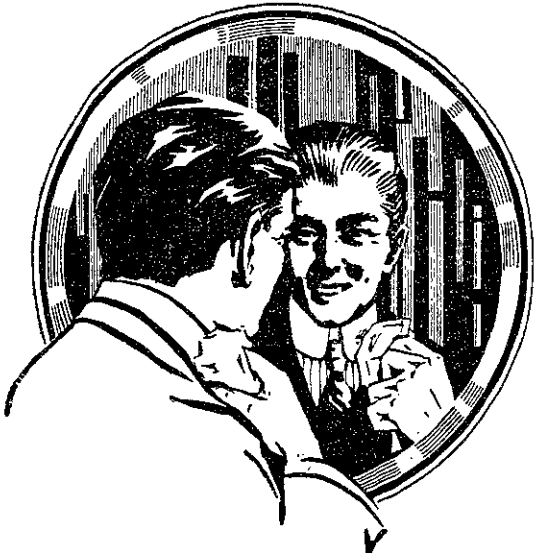
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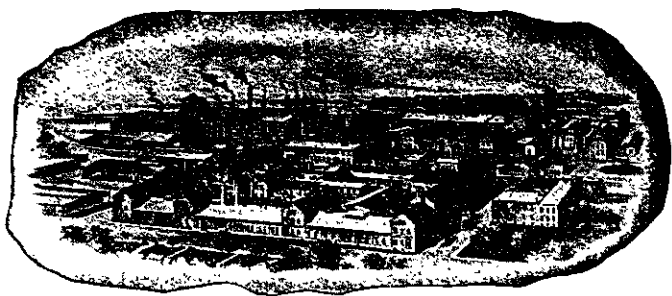
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### VAST PLANS PROPOSED FOR MANNING MERCHANT SHIPS

Training Schools to Turn Out 36,000  
Men for Crews

Plans are being made on an extensive scale by the United States shipping board and the navy to provide man-power for the rapidly growing fleet of transports and cargo carriers, and to make vast improvements at port terminals to expedite the movements of the ships.

The rapid strides which have been made in increasing the ship output as well as the increased troop movement, which makes necessary the transportation overseas of huge shipments of supplies, have served to bring about a redoubled effort on the part of the government.

To Supply 36,000 in a Year

The shipping board training schools expect to provide not less than 36,000 trained men during the next 12 months, who will be prepared as civilian crews to man the new vessels which are to make commercial voyages through the war zone and to all other parts of the world.

These civilian crews will be supplemented by men of the naval reserve, trained under the auspices of the navy department, who will man boats carrying soldiers, ammunition and other supplies to France. The navy program may go well over 100,000 men who will be made available for such purposes.

The plans which are now under contemplation, it is stated on high authority, have been carefully worked out so that there may be no lack of men to man the vessels for all routes as soon as they are turned out. Conferences are in progress with the war department concerning the men available for the civilian merchant marine and the naval reserve under the draft regulations, and an extensive educational campaign soon will be started.

To Have All-American Crews

It is the hope of the shipping board and the navy to lay the foundation for a program which will make possible the manning of the shipping now and after the war with all-American crews. "The division of tonnage is based on an agreement between the shipping board and the navy department dating from last year, which has not been changed," said Chairman Hurley of the shipping board today. "The ships used by the navy for transporting troops and animals as well as cargoes of war materials through the war zone, are manned by naval crews. Ships making commercial voyages through the war zone and to all other parts of the world are manned by civilian crews."

"The shipping board recently gave the navy department an estimate of the number of men the navy will probably need for the merchant ships turned over to it by the shipping board. It is now meeting its own needs for the country's commercial vessels by recruiting and training men for service in the civilian crews of the merchant marine."

"The shipping board, since the war began, has been building up a training system for merchant officers and crews that will now be used to its full capacity for producing the men needed in the merchant marine."

"This system, under the direction of the board's recruiting service, now has 10 training ships and recruiting ships actually in commission, and three others authorized, two of the latter for the government and the Great Lakes respectively."

"The board's Atlantic training squadron, based at Boston, has three cruising training ships, which make regular visits to Philadelphia, New York, Norfolk, and other ports. A receiving ship is maintained at New York and another at Norfolk."

### LIMITED FURLOUGHS APPROVED FOR TEACHERS OF CHEMISTRY

The War Department has just approved the request of the Director of Chemical Warfare Service to furlough back to approved institutions a limited number of teachers of chemistry. This furlough will be administered by the Committee on Education and Special Training, old Land Office Building, Washington, D. C., upon recommendation of the officer in charge of university relations, Chemical Warfare Service.

#### Plan of Procedure

Approved institutions which have already lost many of their instructors through draft or enlistment may now make application for the return of such men, provided that the return is agreeable to the men themselves. In the event of failure to secure the men asked for, the relations section may be able to provide for the assignment of other men whose qualifications would seem to fit them to carry on the work of instruction. Application for furlough of en-

listed men should be made to Chemical Warfare Service, University Relations Section, Seventh and B streets, Washington, D. C.

### MONTHLY RED CROSS REPORT SHOWS INCREASED ACTIVITIES

Work Includes Loans to Newly Commissioned Officers

The American Red Cross has supplied 1,100,000 surgical dressings to the American wounded during the past months; 12 hospitals are being operated; four new hospitals are being built and convalescent homes have been established at Biarritz and other places.

The July monthly report made public recently shows also that the canteen service has supplied 100,000 meals and a million hot drinks to the wounded, to whom 4,000,000 cigarettes also have been distributed.

The American Red Cross is now operating farms for the convalescents, aggregating 249 acres. The report dealing with supplies shows that each division of the army receives 2500 daily papers and 500 weekly magazines. Loans to 362 newly commissioned army officers have been made to assist them in buying equipment.

### NEW AIRPLANE HAS WINGS OF FIFTEEN FOOT SPREAD

The smallest British airplanes now being manufactured are actually of less span than the largest birds. The great albatross has been known to measure nearly eighteen feet from wing-tip to wing-tip. A certain type of "midget" airplane recently exhibited in London is only fifteen feet in width.

"These are the machines which we may expect to see after the war carrying our mails," declared Maj. Orde Lees of the British aviation service. "and they will be almost as universal as the smart automobile mail vans of pre-war times. These small machines will be largely used by the postal authorities on account of the existing limitations of storage and starting grounds in our great cities. Postal aerodromes, like railway stations, must be near the post-offices, at least in the initial stages of the development."

"Later the problem may be solved by the use of pneumatic tube communication."

tion between the central postoffices and the postal aerodromes. In delivering letters to distances of 250 miles or more, the big types of airplanes will be used, but for local work small machines are likely to be much more serviceable.

"Dropping the mail bags by parachute will be given a good trial, and this, if successful, will be of great assistance. Bags may also be picked up while flying, after the manner in which mailbags are now caught by express trains."

### Q. M. C. STARTS A RESEARCH AND SPECIFICATION BRANCH

The Quartermaster Corps announces the establishment of a new branch in the clothing and Equipage Division, which is to be known as the Research and Specification Branch. This branch will connect the procurement of supplies with their consumption and actual use, and will also pass on all specifications submitted by procurement officers. It is intended that this branch shall keep in touch with the actual consumption of supplies furnished by the Clothing and Equipage Division, and all the camps and the various reclamation depots will be visited by representatives of the branch, in order to make certain that the supplies furnished are adapted to the use to which they are put, and are of the proper quality. The new branch will investigate all suggestions, will examine into the various supplies and determine whether they are of suitable quality, and will pass on all specifications submitted by the division to Equipment Board. No departure from specifications in case of emergency will be made without the approval of the Research and Specifications Branch. Establishment of this branch is expected to prove of great value not only to the Quartermaster Corps, but also to the manufacturers and contractors who are supplying equipment for the army.

Some one has said: "If one of the boys hesitated as long in going over the top as some people do in buying Liberty bonds or War Savings Stamps, he would be court-martialed and shot for cowardice. And if the same punishment were meted out to non-combatants for financial cowardice an awful lot of people would be shot at dawn."

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